

WHAT IS CLAIMED IS:

1. An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:
 - (a) a polynucleotide comprising nucleotides 1 to about 456 of the nucleic acid sequence contained in SEQ ID NO:1;
 - (b) a polynucleotide comprising nucleotides 2 to about 456 of the nucleic acid sequence contained in SEQ ID NO:1;
 - (c) the polynucleotide complement of the polynucleotide of (a) or (b); and
 - (d) a polynucleotide at least 90% identical to the polynucleotide of (a), (b) or (c).
2. An isolated nucleic acid molecule comprising about 10 to about 456 contiguous nucleotides from the nucleic acid sequence contained in SEQ ID NO:1.
3. An isolated nucleic acid molecule comprising about 50 to about 200 contiguous nucleotides from the nucleic acid sequence contained in SEQ ID NO:1.
4. An isolated nucleic acid molecule comprising about 100 to about 400 contiguous nucleotides of the nucleic acid sequence contained in SEQ ID NO:1.
5. An isolated nucleic acid molecule comprising about 10 to about 300 contiguous nucleotides from the nucleic acid sequence contained in SEQ ID NO:1.
6. An isolated nucleic acid molecule comprising about 100 to about 300 contiguous nucleotides from the nucleic acid sequence contained in SEQ ID NO:1.
7. The isolated nucleic acid molecule of claim 1, which is DNA.

8. A method of making a recombinant vector comprising inserting a nucleic acid molecule of claim 1 into a vector in operable linkage to a promoter.
9. A recombinant vector produced by the method of claim 8.
10. A method of making a recombinant host cell comprising introducing the recombinant vector of claim 9 into a host cell.
11. A recombinant host cell produced by the method of claim 10.
12. A recombinant method of producing a polypeptide, comprising culturing the recombinant host cell of claim 11 under conditions such that said polypeptide is expressed and recovering said polypeptide.
13. An isolated polypeptide comprising amino acids at least 95% identical to amino acids encoded by at least 100 contiguous nucleic acids from the sequence contained in SEQ ID NO:1.
14. An isolated polypeptide comprising amino acids at least 95% identical to amino acids encoded by at least 200 contiguous nucleic acids from the sequence contained in SEQ ID NO:1.
15. An isolated polypeptide comprising amino acids at least 95% identical to amino acids encoded by at least 300 contiguous nucleic acids from the sequence contained in SEQ ID NO:1.
16. An epitope-bearing portion of the polynucleotide encoded by a nucleic acid sequence comprising the sequence identified in SEQ ID NO:1.
17. The epitope-bearing portion of claim 16, which comprises about 5 to about 30 amino acids encoded by contiguous nucleic acids from a sequence comprising the sequence identified in SEQ ID NO:1.
18. The epitope-bearing portion of claim 17, which comprises about 10 to about 15 amino acids encoded by contiguous nucleic acids from a sequence comprising the sequence of SEQ ID NO:1.
19. An isolated antibody that binds specifically to the polypeptide of claim 15.
20. A monoclonal antibody according to claim 19.

21. A method of modulating apoptosis or proliferation of a cancer cell, comprising regulating expression of SHINC-1 in said mammalian cell.

22. The method of claim 21, wherein said mammalian cell is transformed with a vector encoding an antisense oligonucleotide corresponding to a sequence comprising the sequence of SEQ ID NO:1.

23. An antisense oligonucleotide that inhibits the expression of SHINC-1 in a mammalian cell.

24. The antisense oligonucleotide of claim 23 which is contained in a liposomal formulation.

25. A method of treating cancer characterized by SHINC-1 overexpression by administration of an antisense oligonucleotide or ribozyme that inhibits SHINC-1 expression.

26. A method of treating cancer characterized by SHINC-1 overexpression comprising administering an antibody that specifically binds SHINC-1.

27. A method of detecting cancer characterized by SHINC-1 overexpression or underexpression comprising detecting the levels of SHINC-1 expression and correlating said level of expression to the presence or absence of cancer.

28. The method of claim 27 which is effected by using a cDNA that hybridizes to SHINC-1 mRNA.

29. The method of claim 27 which is effected by]by using an antibody that specifically binds SHINC-1.

30. A method for inhibiting cancer cell proliferation and/or metastasis in a cancer patient comprising administering a ribozyme or antisense oligonucleotide that modulates SHINC-1 expression.

31. The method of claim 30, wherein said cancer is selected from the group consisting of breast cancer, leukemia, lymphoma, melanoma, colorectal cancer, and lung cancer.

32. A method of treating a condition characterized by SHINC-1 underexpression comprising administering an agent that promotes SHINC-1 expression.

33. The method of claim 32, wherein administering an agent that promotes SHINC-1 expression comprises administering SHINC-1 DNA.

34. A method for inhibiting cancer cell proliferation and/or metastasis in a cancer patient comprising administering an antibody that specifically binds SHINC-1; a ribozyme or antisense oligonucleotide that modulates SHINC-1 expression in combination with radio therapy; chemotherapy, hormone or biological anticancer agent.